

Date: Tue, 12 Jul 94 04:30:24 PDT
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>
Errors-To: Ham-Equip-Errors@UCSD.Edu
Reply-To: Ham-Equip@UCSD.Edu
Precedence: Bulk
Subject: Ham-Equip Digest V94 #228
To: Ham-Equip

Ham-Equip Digest Tue, 12 Jul 94 Volume 94 : Issue 228

Today's Topics:

 Alinco DJ-180T
 Defeating AGC on R-2000 Kenwood
 DJ-180T
 ic-230
 MFJ 247/249 SELLER WHAT HAPPENED?
 MORE INFO: On 4.2 Ghz Spectrum Analyzer Setup for Sale
 MORE INFO: On 4.2 Ghz Spectrum Analyzer Setup for Sale.
 Recommendations on HT antenna sought
 SUMMARY DSP algorithms
 TRADE MACINTOSH 2CX FOR DUAL BAND
 UPDATE ON SPECTRUM ANALYZER SALE

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 11 Jul 1994 11:06:30 GMT
From: ihnp4.ucsd.edu!agate!blanket.mitre.org!linus.mitre.org!newsflash.mitre.org!
newsflash!morawski@network.ucsd.edu
Subject: Alinco DJ-180T
To: ham-equip@ucsd.edu

I think I understand the problem with the receive range going back
to 144-148 MHz. The problem is that 144-148 MHz is the default range
for the receiver after a memory reset. In order to get the extended
range, you have to do something extra funny when you turn on the radio,
such as hold "function" AND "moni". (That's just an example, I don't
remember the true sequence, although I may have jotted it down at home).

I learned the true sequence by calling Ham Radio Outlet--someone there knew the trick.

73,

Paul Morawski, AA3DD
morawski@ai.mitre.org

Date: 11 Jul 1994 15:13:38 GMT
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!news.Cerritos.edu!news.Arizona.EDU!
news.arizona.edu!wsears@network.ucsd.edu
Subject: Defeating AGC on R-2000 Kenwood
To: ham-equip@ucsd.edu

Greetings,

I am trying to set up a system for listening to Jupiter on HF, especially for the 'Comet Crash' of Shoemaker-Levy/9 in a few days. However, the Kenwood R-2000 receiver that I have does not have any easy way of defeating the AGC. This is bad from a science point of view since the audio levels are exactly what I want to measure and having the AGC changing the gain on it's own would corrupt the data.

Does anyone know of a way to defeat the AGC on this rig? I've looked over the schematic and it does not seem to be as easy as cutting the wire between the AGC and the IF amp, since some biasing is also going through that line. Besides, I would really prefer to use what someone else has already shown to work.

All ideas and suggestions welcome. Please email if that is convenient. I will summarize.

73,
KG7IO

William D. Sears	'I reserve the right to ask irrelevant
Lunar and Planetary Lab	questions, even impudent ones.
wsears@lpl.arizona.edu	You, of course, don't have to answer.'" --
William D. Sears	'I reserve the right to ask irrelevant
Lunar and Planetary Lab	questions, even impudent ones.
wsears@lpl.arizona.edu	You, of course, don't have to answer.'" --

Date: 11 Jul 1994 18:38:22 GMT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!
news.umbc.edu!eff!blanket.mitre.org!linus.mitre.org!newsflash.mitre.org!newsflash!
morawski@network.ucsd.edu
Subject: DJ-180T
To: ham-equip@ucsd.edu

I think I remember the sequence to activate the extended RX
range on the DJ-180T: Press "lamp" when you turn the HT on.

Paul Morawski, AA3DD
morawski@ai.mitre.org

Date: 11 Jul 1994 14:37:22 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!udel!news.udel.edu!diusys!
dave@network.ucsd.edu
Subject: ic-230
To: ham-equip@ucsd.edu

Robert Wood (w5robert@blkbox.COM) wrote:
: Have the chance to buy a IC-230. Can this rig be used on the
: packet freqs??? I believe it has a "diode" type matix for programming
: the freqs. Haven't seen the rig yet or even know how old it might
: be..... thanks 73's Robert
: w5robert@blkbox.com

The IC-230 uses crystal synthesis. It can be put on packet freqs,
but you will need to buy a crystal to do it.

73, Dave WA3U

Date: Mon, 11 Jul 1994 08:59:55 -0400
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!wp-sp.nba.trw.com!gatekeeper.esl.com!
m21005.esl.com!user@network.ucsd.edu
Subject: MFJ 247/249 SELLER WHAT HAPPENED?
To: ham-equip@ucsd.edu

I LOST YOUR EMAIL ADDRESS AND PHONE#, HAVEN'T HERD FROM YOU OR UPS. IF UOU
STILL HAVE THE MFJ-247 I'AM STILL INTERESTED, YOU WERE TO SHIP COD.LET ME
KNOW IF YOU STILL HAVE IT. THANKS DOUG 408-738-2888 X5825

--
COMMENTS ARE MINE AND NOT RELATED TO ESL.

Date: Mon, 11 Jul 1994 14:37:36 GMT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!
darwin.sura.net!gatekeeper.es.dupont.com!esds01.es.dupont.com!
CHEUNGWD%esvx11.es.dupont.com@network.ucsd.edu
Subject: MORE INFO: On 4.2 Ghz Spectrum Analyzer Setup for Sale
To: ham-equip@ucsd.edu

As of Monday July 18th, the Spectrum Analyzer, Freq Counter, and Signal Generator is STILL HERE. And I've been a bit overwhelmed with the response, both on my phone and thru E-mail.

Anyway, I can't answer everyone individually at this early stage, as it'll take all day. A lot of you are asking for more information about the set, so I'll take some time to describe it.

Spectrum Analyzer

Tektronix: Model 1L20 goes from 10 Mhz to 4.2Ghz and you can get signals tuned/measured accurately to within 100Hz provided you use an accurate marker signal.

The spectrum analyzer unit is housed in a Tektronix 547 solid state oscilloscope mainframe. It is, therefore, about 2' high 16" wide and 2' deep (only eyed it). It weighs about 50lbs. It comes with a crank style tuner, which rotates an analog dial of frequencies across a needle. There are also a series of switches to adjust the bandwidth of the

tuner down to 1Khz-full screen. It also has a series of

dB marked attenuator switches to make sure you don't overload the unit.

It is not calibrated, but places such as Tucker Electronics could do it for around \$800. I have been extremely pleased with its stability. Once you place a signal on the display, it shows absolutely NO DRIFT. If you leave the settings untouched turn off the unit, come back and turn it on, everything stays the same.

Current Tucker Electronic Price:

I purchased this unit 2 years ago for \$847 and I only used it for about a month before moving on to other things.

Frequency Counter

Since the spectrum analyzer was not calibrated and I needed to locate frequencies to within 100Hz, I purchased a modern digital frequency counter. This unit is 2 years old and measures from 0 to 1Ghz.

Now all I had to do was combine with a frequency generator and I had a signal of known frequency which I could use as a marker signal on the spectrum analyzer to match up against a signal I am trying to tune or measure.

This unit is compact and weighs about 1 pound.

Original Cost at JDR Electronics:

\$279

Signal Generator

Nuclear Electronics 0 to 420 Mhz. As the name implies, this is a heavy duty unit and delivers much higher output than the modern signal generators.

It is almost as big as the Spectrum Analyzer and weighs about 30lbs. Since it is vacuum tube based, it will drift in time as it warms ups. It is probably is the weakest part of the set, but it gets the job done for the lowest cost.

Original Cost at Tucker Electronics

\$149

My total cost was over \$1200 in assembling this set. I've already had some starting bids at \$400 come in, and I will, therefore, entertain higher bids.

The effort and cost of SHIPPING will also come into play. I live outside of Wilmington, Delaware.

That's about all. I plan on moving out by August, and don't care to lug the units with me. So I'll probably be making a decision by early next week. I'll post when the set is sold.

Wilson Cheung

Please try to restrict your responses to E-mail only, as you've been overloading my answering machine. But anyway I can be reached at

(302) 451-3128
cheungwd@dupont.com

Date: 11 Jul 1994 17:01:32 GMT
From: lll-winken.llnl.gov!overload.lbl.gov!agate!howland.reston.ans.net!usc!nic-nac.CSU.net!charnel.ecst.csuchico.edu!olivea!sgigate.sgi.com!gazette.esd.sgi.com!mechcad3.esd.sgi.com!glusk@ames.
Subject: MORE INFO: On 4.2 Ghz Spectrum Analyzer Setup for Sale.
To: ham-equip@ucsd.edu

In article <1994Jul11.143251.21302@es.dupont.com>, cheungwd@esvx11.es.dupont.com writes:

|>
|> The spectrum analyzer unit is housed in a Tektronix 547
|> solid state oscilloscope mainframe.
|> ^^^^^^^^^^^^^^

The Tektronix 547 is an excellent oscilloscope mainframe (I have three of them) however, it is not solid state. There are at least 30 tubes in each of mine. To my knowledge, there is no solid state mainframe that would accept the 1L20.

--
Mark Glusker, glusk@esd.sgi.com

Date: 11 Jul 1994 17:11:36 GMT
From: ihnp4.ucsd.edu!swrinde!sgiblab!cs.uoregon.edu!reuter.cse.ogi.edu!netnews.nwnet.net!news.u.washington.edu!cummings@network.ucsd.edu
Subject: Recommendations on HT antenna sought
To: ham-equip@ucsd.edu

I just bought an Icom T21A, and I love it, except for the teensy little antenna. It just doesn't seem to cut the mustard. Can anyone tell me their experiences with HT antennas made by other companies? I have an AEA hotrod that I used on my old HT, but it seem too heavy for the little mount on the T21A.

Also, anyone know where to get an adapter so I can put a BNC on that little

threaded connector the T21A has? When I ask around here, I just get a shrug.

Thanks in advance.

--

Mike Cummings NX7E cummings@u.washington.edu
"Like jewels in a crown, the precious stones glittered in the Queen's
round metal hat." - Jack Handey

Date: 11 Jul 1994 16:27:42 GMT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!noc.near.net!sunfish.hi.com!
brainiac.hi.com!user@network.ucsd.edu
Subject: SUMMARY DSP algorithms
To: ham-equip@ucsd.edu

Here's what I've heard so far regarding the denoising algorithms in the popular digital audio filters. None of this is confirmed, so take it with a grain of salt.

The Timewave unit uses the LMS/short-time correlation algorithm, but with a 16-bit converter.

The JPS NIR-10 uses an FFT/threshold/inverse-FFT algorithm, where FFT frequency bins that are below a threshold are set to zero. Some say that this produces more audible artifacts than the LMS/short-time correlation algorithm. I can't say for sure; I've only heard the NIR-10 and no others, but it seems like a reasonable claim.

The JPS units that advertise "pink noise reduction" appear to use the LMS/short-time correlation algorithm, like W9GR's.

Regards,
-Steve

Steve Byan	internet: steve@hi.com
Hitachi Computer Products (America), Inc.	
1601 Trapelo Road	phone: (617) 890-0444
Waltham, MA 02154	FAX: (617) 890-4998

Date: Mon, 11 Jul 1994 09:04:28 -0400
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!wp-sp.nba.trw.com!gatekeeper.esl.com!
m21005.esl.com!user@network.ucsd.edu

Subject: TRADE MACINTOSH 2CX FOR DUAL BAND
To: ham-equip@ucsd.edu

HI ALL, I'AM STILL LOOKING FOR A GOOD CONDITION DUAL BAND MOBILE RIG 2/70
1990 MODELS UP, IN EXCHANGE FOR A MAC 2CX. THE COMP IS 2 YEARS OLD VERY
GOOD CONDITION, CONFIGURED WITH 8 MEG RAM/ 80 MEG HD, APPLE COLOR CARD, STD
KB, MOUSE BOXES & MANUALS. THE REASON IS I HAVE 3 COMPUTERS AND NEED TO
SELL ONE TO PAY FOR A DUAL BAND RIG. ANY INTEREST I CAN BE REACHED AT 408
738-2888 X5825 CALIF TIME, OR E-MAIL ME WITH DETAILS
DOUG_HUSTON@SMTP.ESL.COM

--
COMMENTS ARE MINE AND NOT RELATED TO ESL.

Date: Mon, 11 Jul 1994 18:38:09 GMT
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!convex!darwin.sura.net!
gatekeeper.es.dupont.com!esds01.es.dupont.com!
CHEUNGWD%esvx11.es.dupont.com@network.ucsd.edu
Subject: UPDATE ON SPECTRUM ANALYZER SALE
To: ham-equip@ucsd.edu

OK, I've got some people asking if I'd be willing to split
up the set. The answer is yes, but only for the spectrum analyzer.
So far, as of Monday JULY 11th (sorry about mentioning the 18th),
I've got two bids at \$400 from CA, and two more locally at the same
price. The best bid gets a spectrum analyzer (with or without the
extra stuff).

I've got a bunch of other requests for more info coming
everywhere, including across the seas.

I will feedback the bids as I get them, so you can decide if
you want to bid something higher. I'll be making final decisions
in about 2 weeks.

Wilson Cheung

Date: Mon, 11 Jul 1994 16:37:40 GMT
From: ihnp4.ucsd.edu!swrinde!emory!cs.utk.edu!stc06.CTD.ORN.L.GOV!rsg1.er.usgs.gov!
junger@network.ucsd.edu
To: ham-equip@ucsd.edu

References <2volrt\$ghs@rigel.infinet.com>, <jchandleCsqFCs.CyM@netcom.com>,
<8-28kexGLH067yn@cris.com>

Subject : Re: Timewave DSP (W9GR still offering kits)

In article <8-28kexGLH067yn@cris.com>, Marv Uphaus <Muphaus@cris.com> wrote:

>In article <jchandleCsqFCs.CyM@netcom.com>,

>jchandle@netcom.com (James W Chandler III) wrote:

>

>>The latest version is \$125 if I remember correctly. I wrote him for info
>>at the beginning of the year. Heard so many good things about it but will
>>finally get around to purchasing one in the next couple of months.>

>

>

What are the component(s) or technology that drive the prices of the
newer DSP's so high? Is it the A -> D -> A or the programming of the
algorithms?

thanks and 73 - John, W3G0I

End of Ham-Equip Digest V94 #228
